

#### **ELF Termination**

Disposition of Mitigation Measures from Affected Utilities
Iron Mountain, Michigan
Dec. 9, 2004

Statement A: Approved for Public Release; Distribution Is Unlimited (8 DEC 2004)



#### Purpose

- Discuss the history of the mitigation effort
- Define terms and affected parties
- Discuss the mitigation contract process
- Discuss the disposition of mitigation measures
- A separate action is in process to address the National Environmental Policy Act and is not part of this presentation



# History: Interference Mitigation (IM)

- Interference effects discovered during ELF communications concept formulation in the 1960s
  - 1962 -- Site Alpha at Mt Airey, N.C. energized, telephones ring, Bell Labs brought in, ringer isolators installed.
  - 1969 -- Clam Lake facility energized at low power. Local telephone systems mitigated under contract to Bell Labs. Power was not mitigated.
- Development of IM techniques began in earnest, continued throughout the 1970s and 1980s
  - 1970 -- NAVFAC (Naval Facilities Command) negotiated "Accommodation Agreements" with "Hold Harmless Clause" with Bayfield, Jump River and Price Electric Cooperatives. NAVFAC contracts to mitigate the three utilities to permit full power operation of the ELF transmitter (Clam Lake).
  - Focus was on telephone, power and other metallic facilities
  - IITRI (IIT Research Institute) acted as Navy's technical advisor
    - Performing interference analyses
    - Recommending IM techniques and designs
    - Reviewing utility IM designs
- 1981 -- President Reagan decides to deploy two transmitter ELF system comprised of an upgraded Clam Lake facility and a new facility at Republic, MI
  - Michigan IM included other facilities: cable television, mines



## History: Transition of IM Contracts to ITRI / Alion

- 1982-84 -- Discussions between the Navy and utilities. Utilities require "Hold Harmless Clause" and desire to minimize government oversight
  - Such clauses were precluded by Executive Order during Nixon Administration. Issue raised to Assistant Secretary of the Navy level by Chief of Naval Operations. Decision made to task ITRI to contract with the utilities and provide liability insurance in place of the "Hold Harmless Clause".
- ♦ 1988-89 -- U.S. Navy contracted with IITRI to oversee all IM operations and maintenance contracts with utility/facility owners and provide for the indemnification
  - Effectively removes the Navy from utility oversight.
- ◆ In December 2002, some ITRI employees purchased substantially the assets of ITRI and formed a new company; Alion Science and Technology (Alion). The ELF contract was transferred to Alion as part of the purchase.
- September 17, 2004 Operational decision to terminate ELF; ELF transmission ceased Sept. 30, 2004

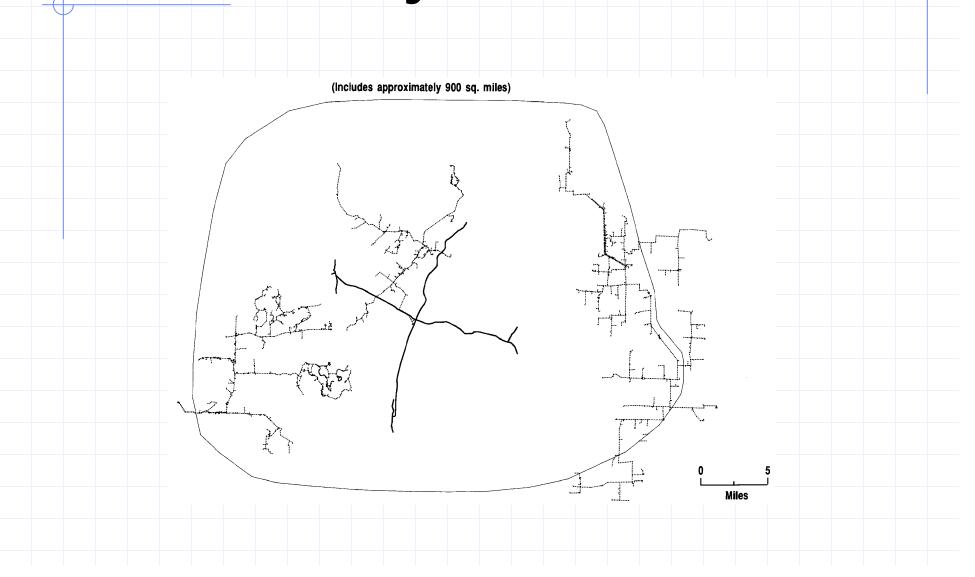


#### **Definition of Terms**

- Interested Parties State and local (Michigan and Wisconsin) government, affected facility owners (CATV, telephone, mines, fence, power), land owners, U.S. Forest Service, Michigan Department of Natural Resources.
- Affected Parties Those facility owners directly affected by ELF operations and who require mitigation.
- Contract Process The negotiated sub-contracts between affected parties and Alion and the prime contract between Alion and the Navy (Naval Undersea Warfare Center).
- ◆ De-Mitigation Disposition of mitigation measures. Allows utilities to determine best route for their individual plant.
- Mitigation Boundary Line encompassing the region where facilities may have been affected by interference mitigation.

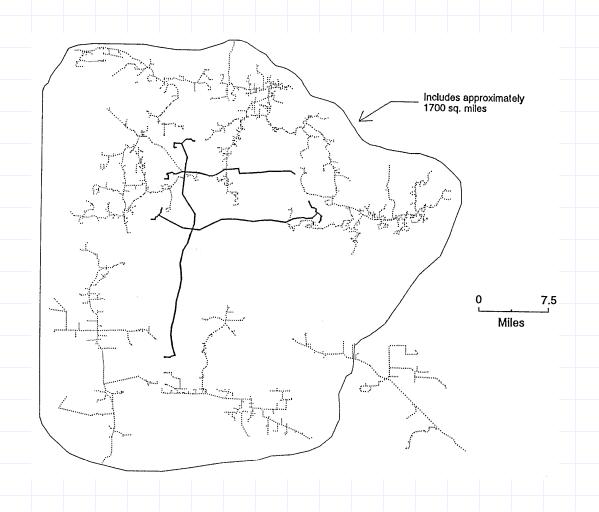


## **ELF Interference Mitigation Boundary in Wisconsin**





## **ELF Interference Mitigation Boundary in Michigan**





### **Utility Mitigation Points**

- Navy provides for mitigation of utilities due to the effects of operations of the ELF Communications System.
- Navy provides for differential costs due to mitigation and consequential costs for ELF operations.
  - Mitigation requirements identified by Alion, equipment purchased and installed by facility owner. Costs (ownership, maintenance) reimbursed through the contract process.
- Mitigation equipment is property of the utility.
- Mitigation certification (safety and effectiveness) was responsibility of Alion.



# Affected Parties (Mitigated)

- NRTF Clam Lake
  - CenturyTel, Inc.
  - Jump River Electric Co-op
  - Chequamegon Communications Co-op
  - Bayfield Electric Co-op
  - Price Electric Co-op
  - Wisconsin Fence Owners
- NRTF Republic
  - Grove Cable Company
  - Charter Communications, Inc.
  - Upper Peninsula Telephone Company
  - Michigan Mines -- Empire Mine and Tilden Mine
  - SBC
  - We Energies
  - Upper Peninsula Power Company
  - American Transmission Co.
  - Michigan Fence Owners



### Mitigation Disposition Process

- Individually contract with each affected utility
  - Alion is the principle point of contact
  - Navy closely monitors progress
- Negotiate a task identifying the disposition of mitigation equipment according to each utility's requirements to move to a 'standard' configuration
  - Effectively eliminate the 'mitigation standards' from each utility
- Reimburse the utilities for the cost of mitigation disposition
  - Reimburse for consequential costs of mitigation during the disposition process



#### Conclusion

- The Navy is committed to working with the affected utilities to dispose of the mitigation equipment within the interests of the individual companies.
- The Navy will continue to work within the contractual process using Alion Science and Technology as the technical agent to execute the disposition process.
- The Navy will continue a public outreach effort to ensure interested state and local governments and other parties are well informed of processes and plans.